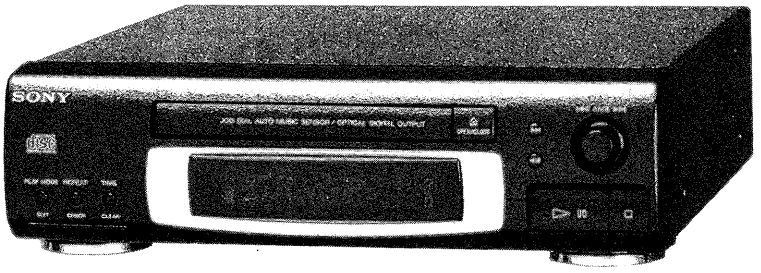
CDP-EX10

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model
Tourist Model



This set is the CD player section in
MHC-EX5/EX7/EX9AV/EX10AV.

Model Name Using Similer Mechanism	NEW
CD Transport Mechanism Type	CDM28-5BD19
Base Unit Type	BU-5BD19
Optical Pick-Up Type	KSS-213B

SPECIFICATIONS

System — Compact disc digital audio system
Laser — Semiconductor laser
Wavelength — 780 – 790 nm
Frequence response — 20 Hz – 20 kHz (±0.5 dB)
Signal-to-noise ratio — More than 105 dB
Dynamic range — More than 95 dB
Outputs
- CD OUT (phono jacks):
  - Output level 2 V (at 50 kilohms)
  - Load impedance over 10 kilohms
- CD DIGITAL OPTICAL OUT (Square optical connector jack, rear panel):
  - wave length 660 nm
  - output level –18 dBm

Dimensions
- Approx. 280 x 85 x 285 mm (w/h/d) (11 1/8 x 3 3/8 x 11 1/4 inches)

Mass — Approx. 2.0 kg (4 lb 7 oz)

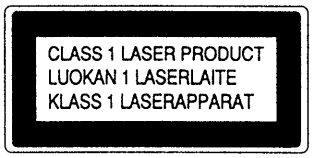
Design and specifications are subject to change without notice.

COMPACT DISC PLAYER

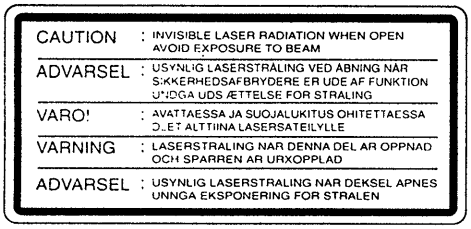
SONY®

使用時は添付資料も参照のこと
Refer to the additional documents.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



This Compact Disc player is classfied as a CLASS 1 LASER product.
The CLASS 1 LASER product label is located on the rear exterior.


CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AVOID EXPOSURE TO BEAM
ADVARSEL : USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSÆTTELSE FOR STRÅLING
VARO! : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA LASERSATEILYLLE
VARNING : LASERSTRÅLING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD
ADVARSEL : USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN

This caution label is located inside the unit.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor ofthe circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

Section	Title	Page
1.	GENERAL	3
2.	ELECTRICAL ADJUSTMENTS	4
3.	DIAGRAMS	
3-1.	IC Pin Function	
	• IC601 System Control, FL Driver (µPD78044AGF)	6
3-2.	Block Diagram	8
3-3.	Circuit Boards Location	10
3-4.	Printed Wiring Board — Main Section —	11
3-5.	Schematic Diagram — Main Section —	13
3-6.	Schematic Diagram — BD Section —	16
3-7.	Printed Wiring Board — BD Section —	18
3-8.	Semiconductor Lead Layouts	19
4.	EXPLODED VIEWS	
4-1.	Chassis Section	20
4-2.	CD Mechanism Section (CDM28-5BD19)	21
4-3.	Optical Pick-up Block Section (BU-5BD19)	22
5.	ELECTRICAL PARTS LIST	23

SERVICING NOTE

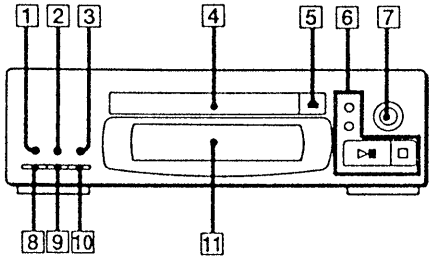
• POWER SUPPLIED WHILE SERVICING

This unit does not work independently because of not having the power supply.
It must be unite together with the other units when repaired.

SECTION 1
GENERAL

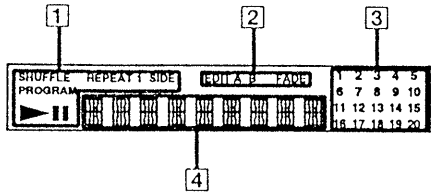
This section is extracted from instruction manual.

Front Panel



1 PLAY MODE button (8, 17)
2 REPEAT button (9)
3 TIME button (7)
4 Disc tray (7)
5 ⏏ OPEN/CLOSE button (open/close of the disc tray) (7, 15)
6 CD player operating buttons
◀◀ / ▶▶ (manual search) (8)
▷II (play/pause) (7, 16)
□ (stop) (7, 15)
7 I◀◀ AMS ▶▶I control (7, 17)
8 EDIT button (16, 17)
9 CHECK button (8, 17)
10 CLEAR button (8)
11 Display window (7, 16, 17)

Display Window



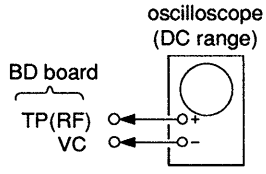
1 CD play mode indication (7)
2 CD edit mode indication (16)
3 Music calendar (7, 16)
4 Step/track number/playing time indication (7, 9, 16)

SECTION 2
ELECTRICAL ADJUSTMENTS

Note :

1. Basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.
5. Adjust the focus bias adjustment when optical block is replaced.

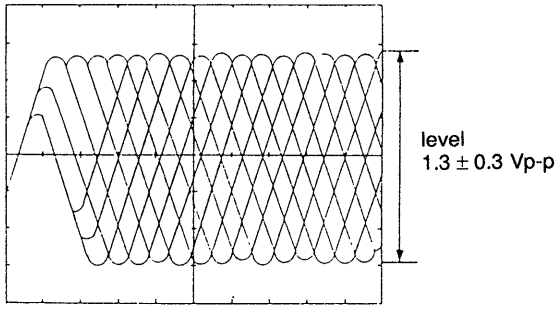
Focus Bias Adjustment



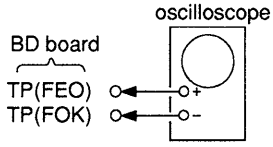
Procedure:

1. Connect oscilloscope to test point TP (RF). (GND terminal : VC)
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Adjust RV101 so that the waveform is clear.
   (Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.)
5. After adjustment, check the RF signal level.

• RF signal
VOLT/DIV : 200 mV
TIME/DIV : 500 nS



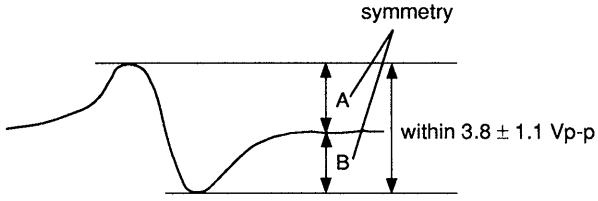
S Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FEO).
2. Connect between test point TP (FOK) and GND by lead wire.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3.8±1.1 Vp-p.

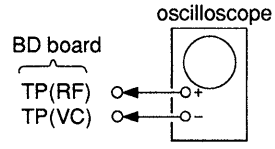
S-curve waveform



6. After check, remove the lead wire connected in step 2.

Note : • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check



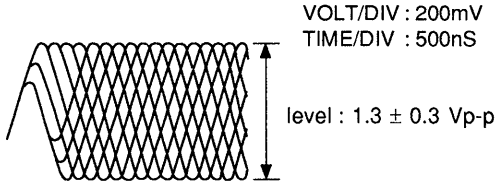
Procedure :

1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

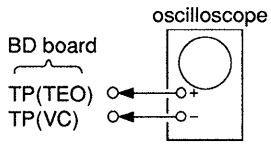
Note :

Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

RF signal waveform



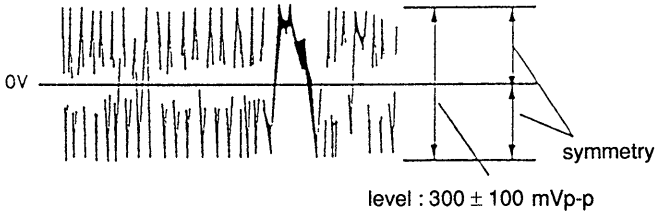
E-F Balance Check



Procedure :

1. Connect oscilloscpe to test point TP (TEO).
2. Turned Power switch on.
3. Connect pin ㉔ of IC601 on the PANEL board to GND with a lead wire.
4. Put disc (YEDS-18) in and playback.
5. Push TIME button.
6. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0Vdc, and check this level.

Traverse waveform



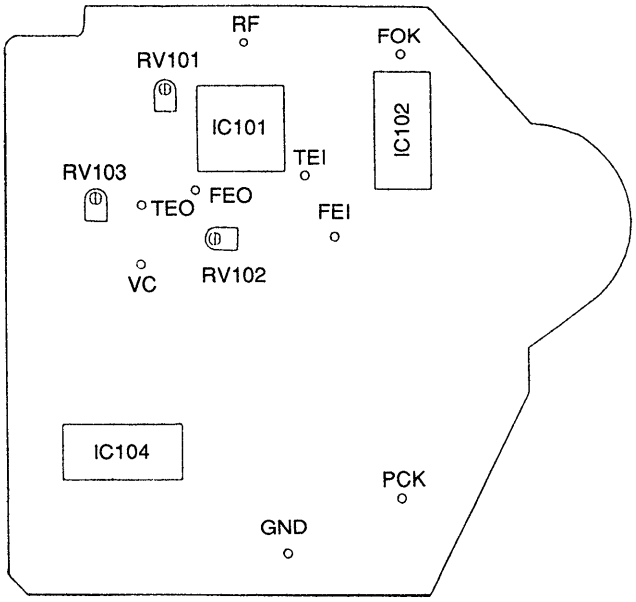
7. Remove the lead wire connected in step 1.

Focus/Tracking Gain Adjustment (RV102, RV103)

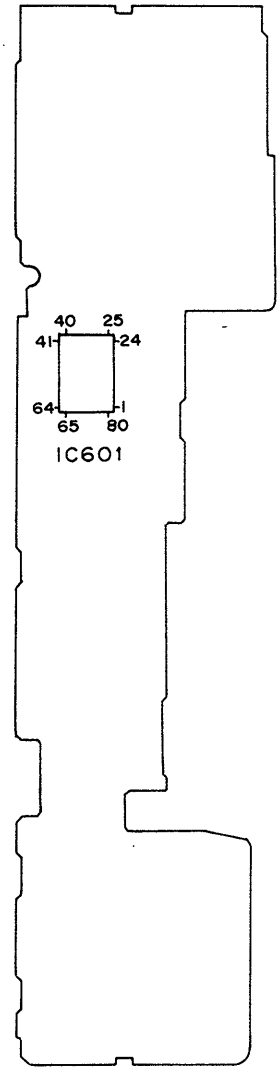
This gain has a margin, so even if it is slightly off.
There is no problem.
Therfore, do not perform this adjustment.
Please note that it should be fixed to mechanical center position when you moved and do not know original position.

Adjustment Location :

[BD BOARD] (Conductor Side)



[PANEL BOARD] (Conductor Side)



SECTION 3
DIAGRAMS

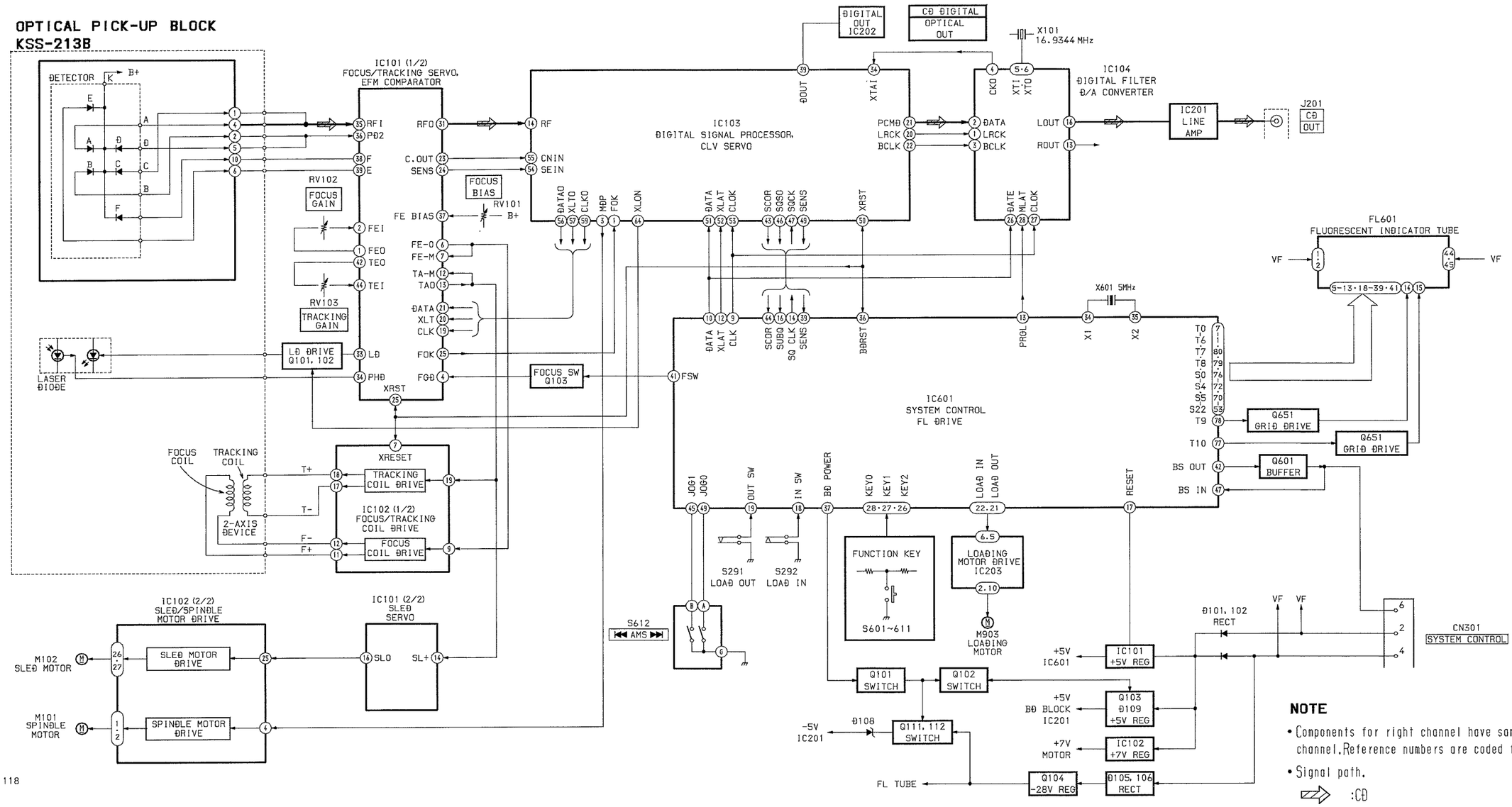
3-1. IC PIN FUNCTIONS

- **IC601 SYSTEM CONTROL, FL DRIVER (μPD78044AGF)**

Pin No.	Pin Name	I/O	Function
1	T6	O	FL display grid output
2	T5	O	
3	T4	O	
4	T3	O	
5	T2	O	
6	T1	O	
7	T0	O	
8	VDD	–	+5V power supply
9	CLK	O	Serial clock output to DSP (CXD-2507AQ)
10	DATA	O	Serial data output to DSP (CXD-2507AQ)
11	———	–	Fixed at GND
12	XLAT	O	Serial data latch pulse output to DSP (CXD-2507AQ)
13	PRGL	O	Serial data latch pulse output to D/F DAC (PCM-1710U)
14	SQCLK	O	Subcode Q data read clock output to DSP (CXD-2507AQ)
15	———	–	Not used (open)
16	SUBQ	I	Subcode Q data input from DSP (CXD-2507AQ)
17	RESET	I	System reset input ("L"=Active)
18	INSW	I	S292 (loading-in switch) input
19	OUTSW	I	S291 (loading-out switch) input
20	AVss	–	GND
21	LDOUT	O	Output for rotating M903 (loading motor) in the loading-out direction
22	LDIN	O	Output for rotating M903 (loading motor) in the loading-in direction
23	ADJ	I	Test mode input. "L"=Stops GFS check.
24	AFADJ	I	Test mode input. Fixed at "H" ("L":Test mode)
25	MODE	I	Not used (Fixed at "H")
26	KEY2	I	Key AD input
27	KEY1	I	
28	KEY0	I	
29	AVDD	–	+5V power supply
30	AVREF	–	
31	———	–	Fixed at GND
32	———	–	Not used (open)
33	Vss	–	GND
34	X1	I	Clock (4MHz)
35	X2	O	
36	BDRST	O	BD reset output
37	BDPOWER	O	BD power ON/OFF output
38	———	–	Not used (open)
39	SENS	I	SENS input from DSP (CXD-2507AQ)
40	AMUTE	O	Muting ON/OFF output

Pin No.	Pin Name	I/O	Function
41	FSW	O	
42	BSOUT	O	Audio bus output
43	———	–	Not used (open)
44	SCOR	I	Subcode sync S0+S1 detection input
45	JOG1	I	JOG input
46	———	–	Not used (open)
47	BSIN	I	Audio bus input
48	IC (VPP)	–	Connect to GND
49	JOG0	I	JOG input
50	———	–	Not used (open)
51	———	–	
52	V_{DD}	–	+5V power supply
53	S22	O	FL display segment output
54	S21	O	
55	S20	O	
56	S19	O	
57	S18	O	
58	S17	O	
59	S16	O	
60	S15	O	
61	S14	O	
62	S13	O	
63	S12	O	
64	S11	O	
65	S10	O	
66	S9	O	
67	S8	O	
68	S7	O	
69	S6	O	
70	S5	O	
71	VLOAD	–	–28V power supply for driving FL display
72	S4	O	FL display segment output
73	S3	O	
74	S2	O	
75	S1	O	
76	S0	O	
77	T10	O	FL display grid output
78	T9	O	
79	T8	O	
80	T7	O	

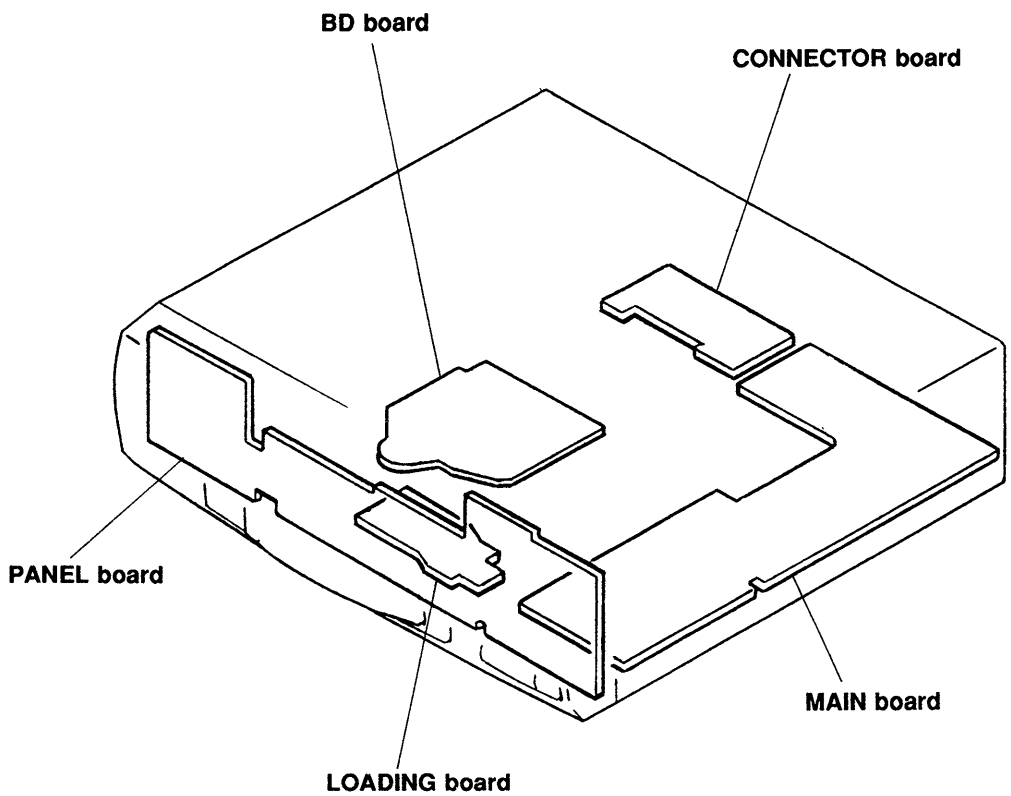
3-2. BLOCK DIAGRAM



NOTE

- Components for right channel have same values as for left channel. Reference numbers are coded from
- Signal path.
  ⇨ :CD

3-3. CIRCUIT BOARDS LOCATION



3-4. PRINTED WIRING BOARD — MAIN SECTION —

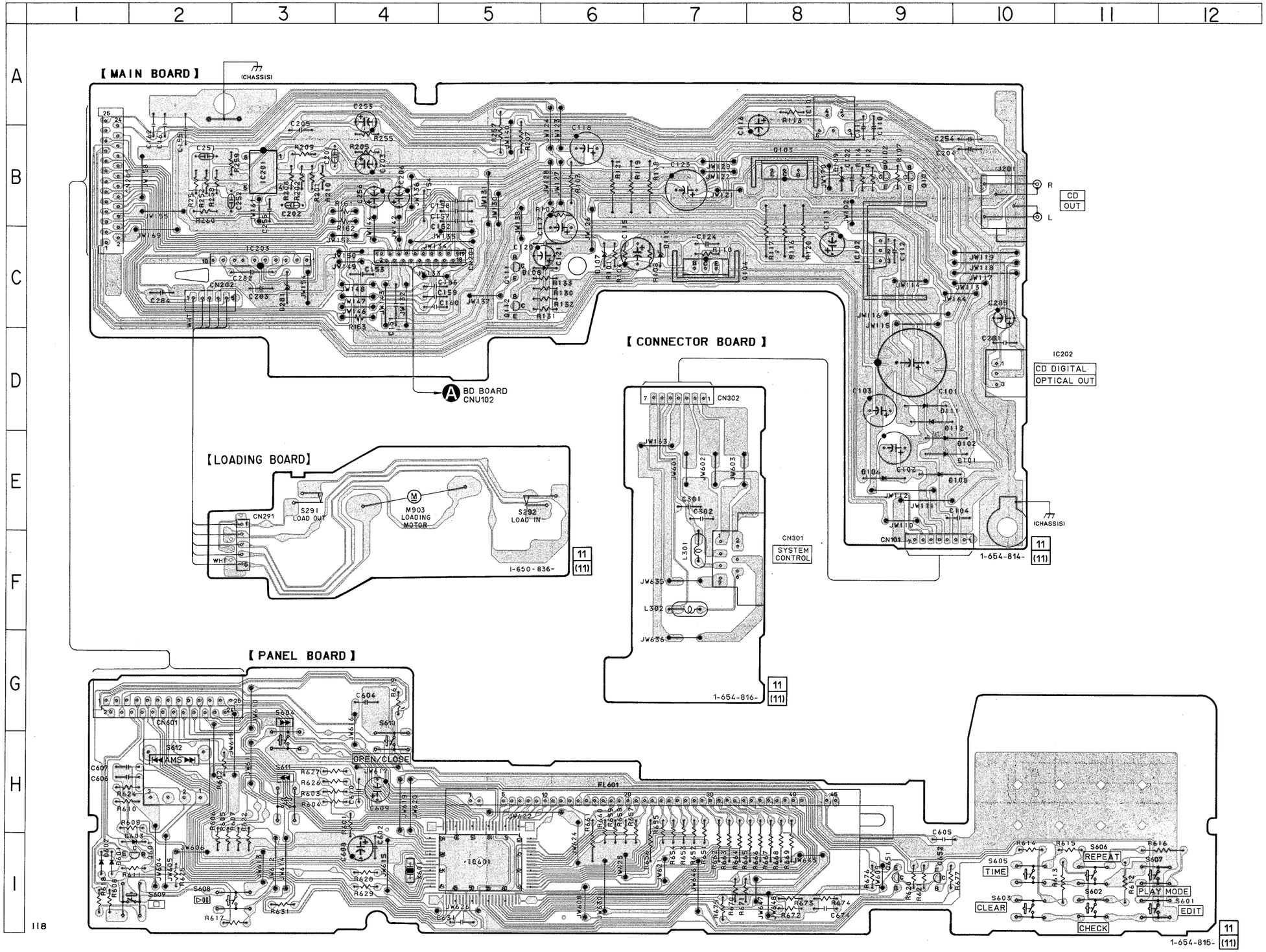
• See page 19 for Semiconductor Lead Layouts.

Note:

- ○—— : parts extracted from the component side.
- ▭ : Pattern on the side which is seen.

• **Semiconductor Location**

Ref. No.	Location
D101	E-9
D102	E-9
D105	E-9
D106	E-9
D107	C-6
D108	C-6
D109	B-8
D110	C-7
D111	D-9
D112	D-9
D281	C-3
D601	I-1
D602	I-1
D603	I-2
IC101	A-8
IC102	C-9
IC201	B-3
IC202	D-10
IC203	C-3
IC601	I-5
Q101	B-10
Q102	B-9
Q103	B-8
Q104	C-7
Q111	C-5
Q112	C-5
Q601	I-2
Q651	I-9
Q652	I-9

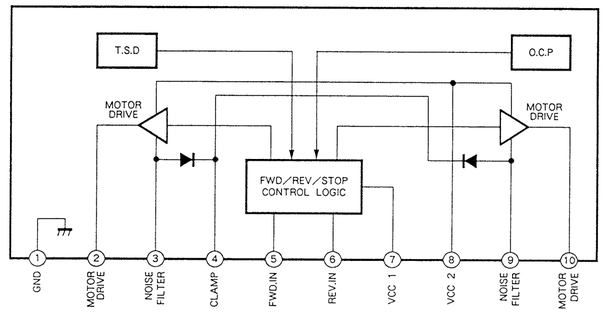


3-5. SCHEMATIC DIAGRAM — MAIN SECTION —

• See page 6 for IC Pin Functions. (IC601)

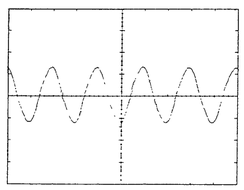
• IC Block Diagrams

IC203 LB1641



• Waveform

⑩ IC601 ㉞ pin 5.36Vp-p 5MHz



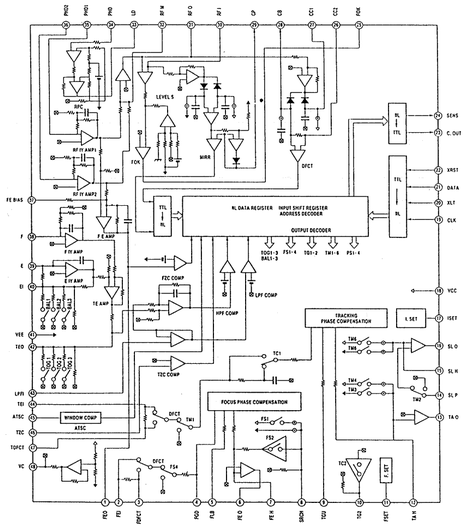
NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- B+ : B+ Line.
- B− : B− Line.
- Voltages and waveforms are dc with respect to ground under no-signal (deturned) conditions. no mark: PLAY
- Voltages are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.

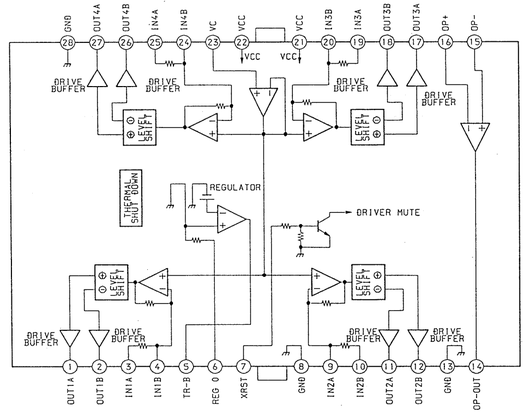
⇨ : CD

CDP-EX10 • IC Block Diagrams

IC101 CXA1782BQ

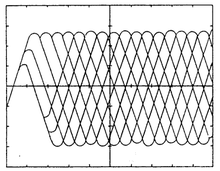


IC102 BA6397FP

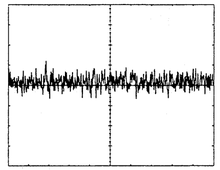


• Waveforms

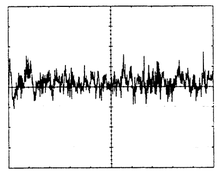
❶ IC101 ㉛ pin 1.4Vp-p



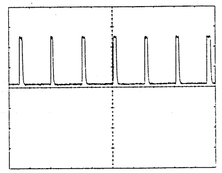
❷ IC101 ㊹ pin 8mVp-p 0.2ms/DIV



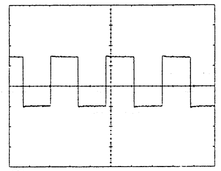
❸ IC101 ② pin 20mVp-p 2ms/DIV



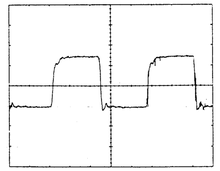
❹ IC103 ③ pin 2.4Vp-p 7.5µsec



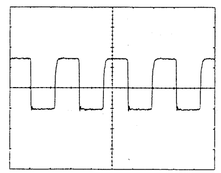
❺ IC103 ㉘ pin 5.1mVp-p 137µsec



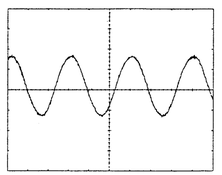
❻ IC103 ㉕ pin 5.1Vp-p 232.7sec



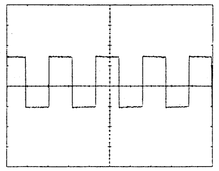
❼ IC103 ㉒ pin 5.1Vp-p 472.7nsec



❾ IC104 ⑤ pin 3Vp-p 16.9344MHz



❽ IC103 ㉙ pin 5.1Vp-p 23µsec

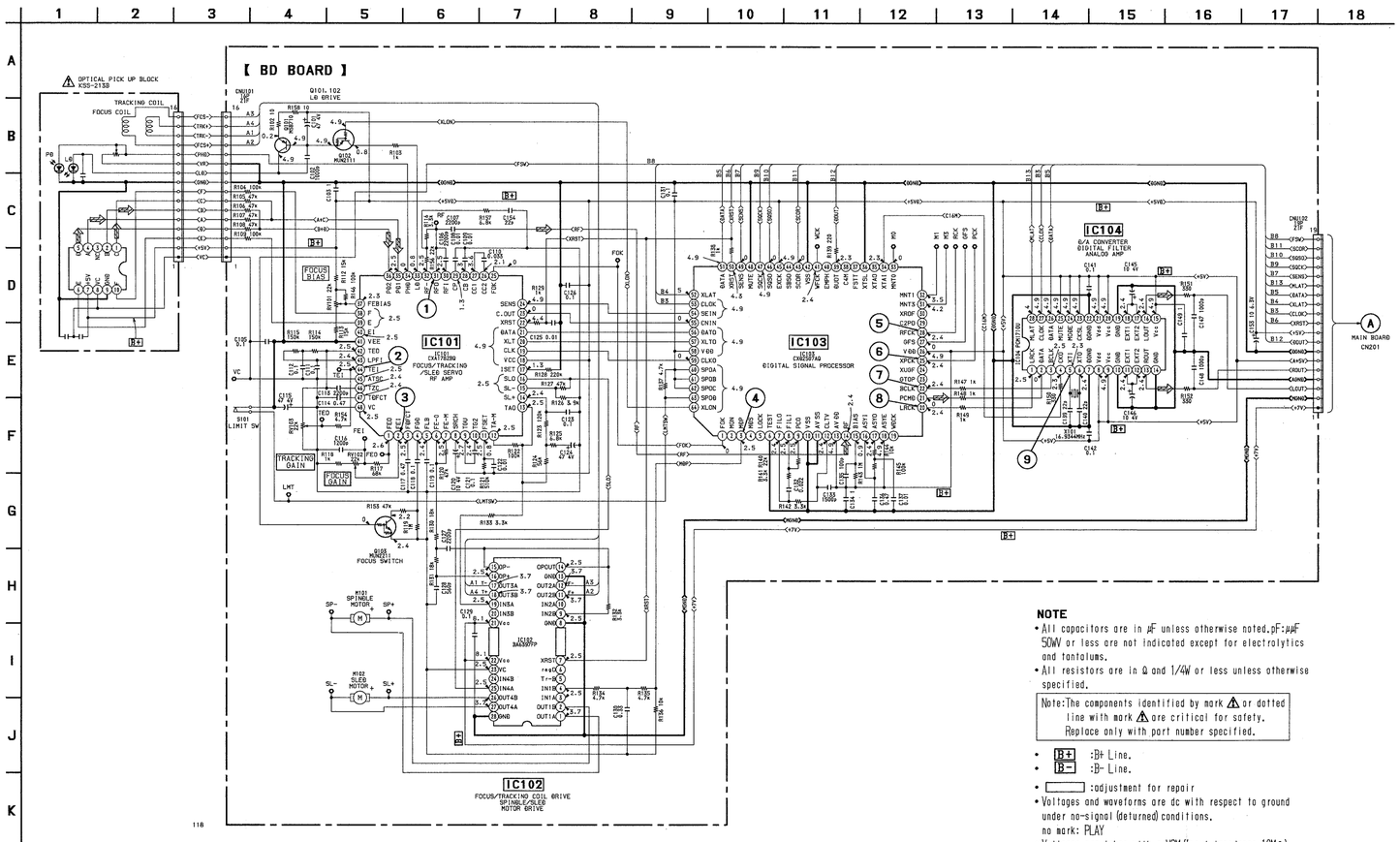


Note:
- ⊕ : Through hole.
- ▒▒ : Pattern on the side which is seen. (The other layer's patterns are not indicated.)

• Semiconductor Location

Ref. No.	Location
IC101	H-3
IC102	H-4
IC103	C-3
IC104	J-2
Q101	E-3
Q102	G-3
Q103	E-2

3-6. SCHEMATIC DIAGRAM — BD SECTION —



NOTE

- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.

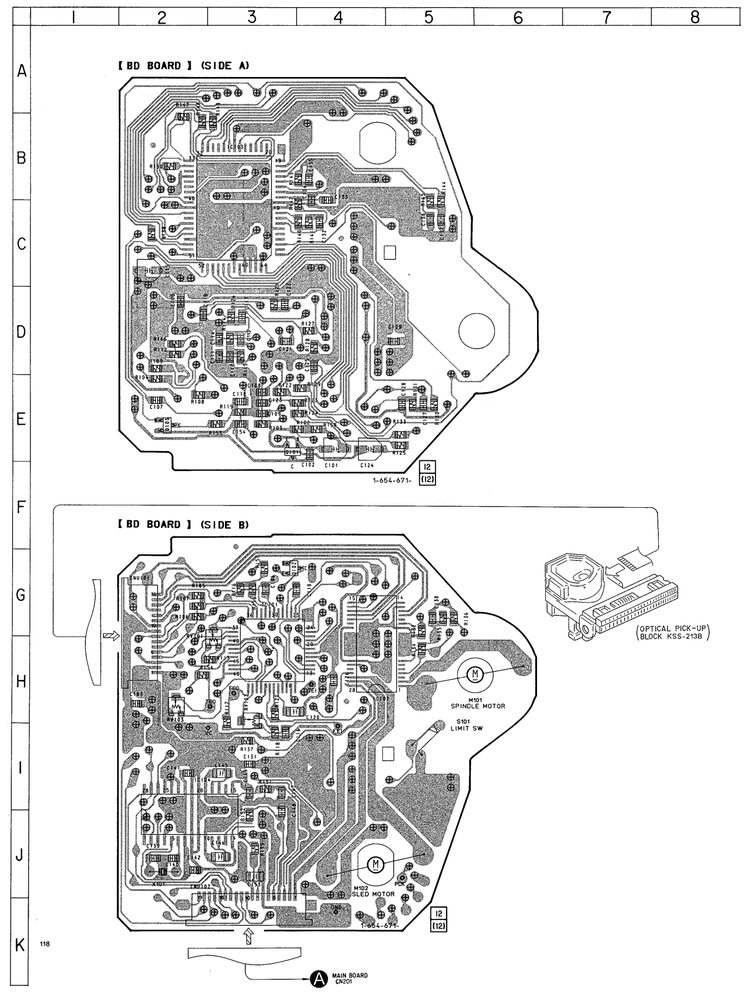
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- B+ : B+ Line.
- B− : B− Line.
- ▭ : adjustment for repair
- Voltages and waveforms are dc with respect to ground under no-signal (deturned) conditions. no mark: PLAY
- Voltages are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.

⇨ : CD

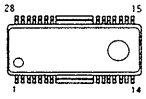
3-7. PRINTED WIRING BOARD — BD SECTION —

• See page 10 for Circuit Boards Location.
• See page 19 for Semiconductor Lead Layouts.

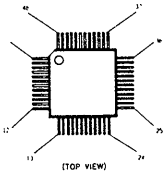


3-8. SEMICONDUCTOR LEAD LAYOUTS

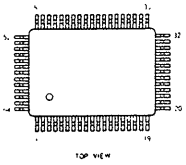
BA6397FP



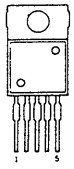
CXA1782BQ



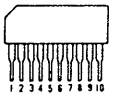
CXD2507AQ



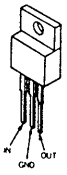
L78MR05



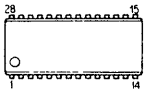
LB1641



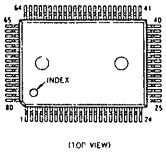
M5F7807



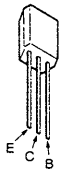
PCM1710U-B



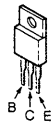
μPD78044AGF-091-3B9



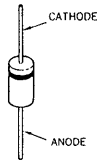
DTA114ES
DTC114ES
2SC2603-EF



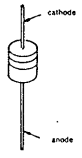
2SB1094-LK
2SD2012



RD3.6ES-B1
RD3.9ES-B1
RD5.1ES-B2
RD5.6ES-B2
RD30ES-B2



1N4148M
10E2

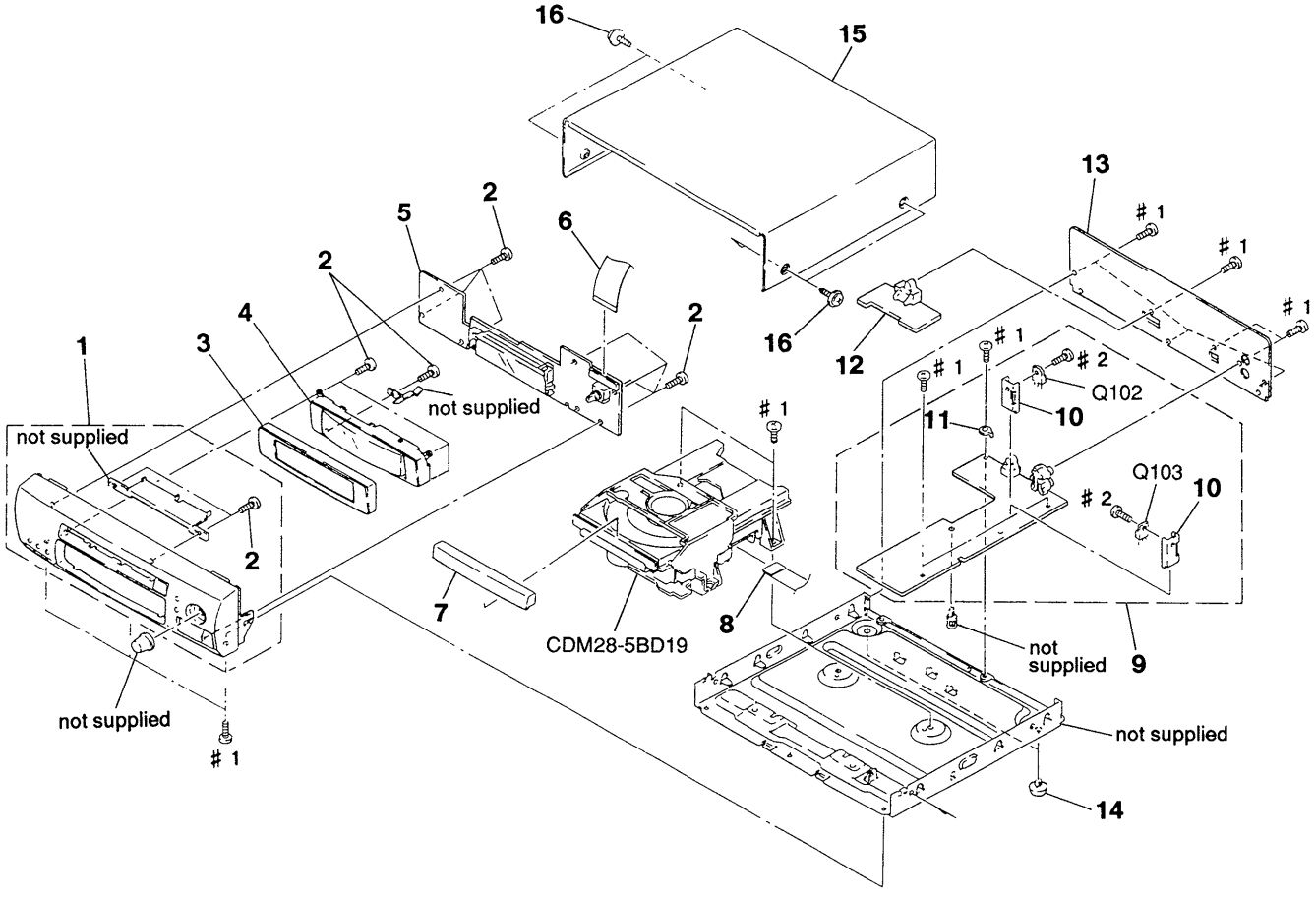


SECTION 4
EXPLODED VIEWS

NOTE:
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

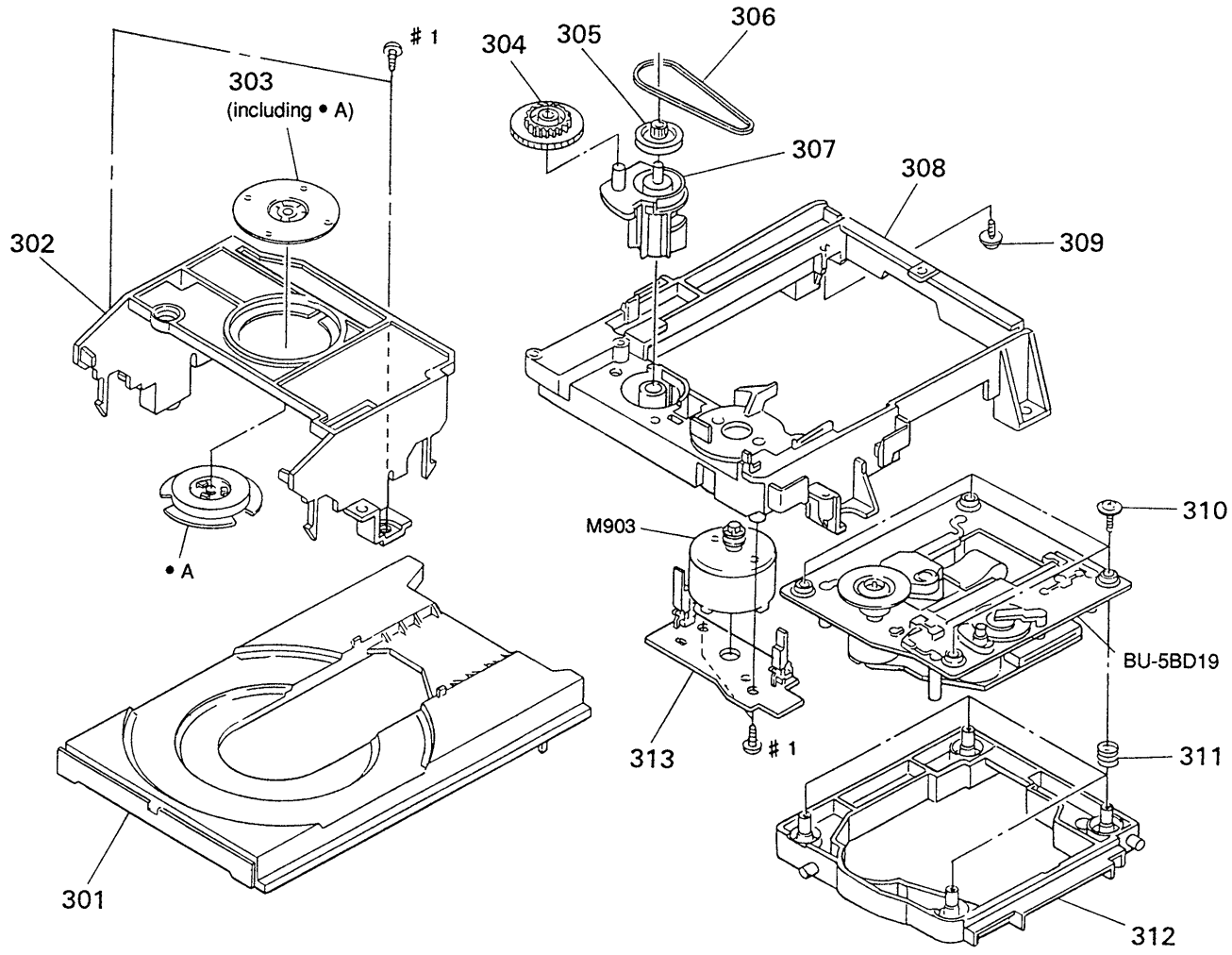
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

4-1. CHASSIS SECTION



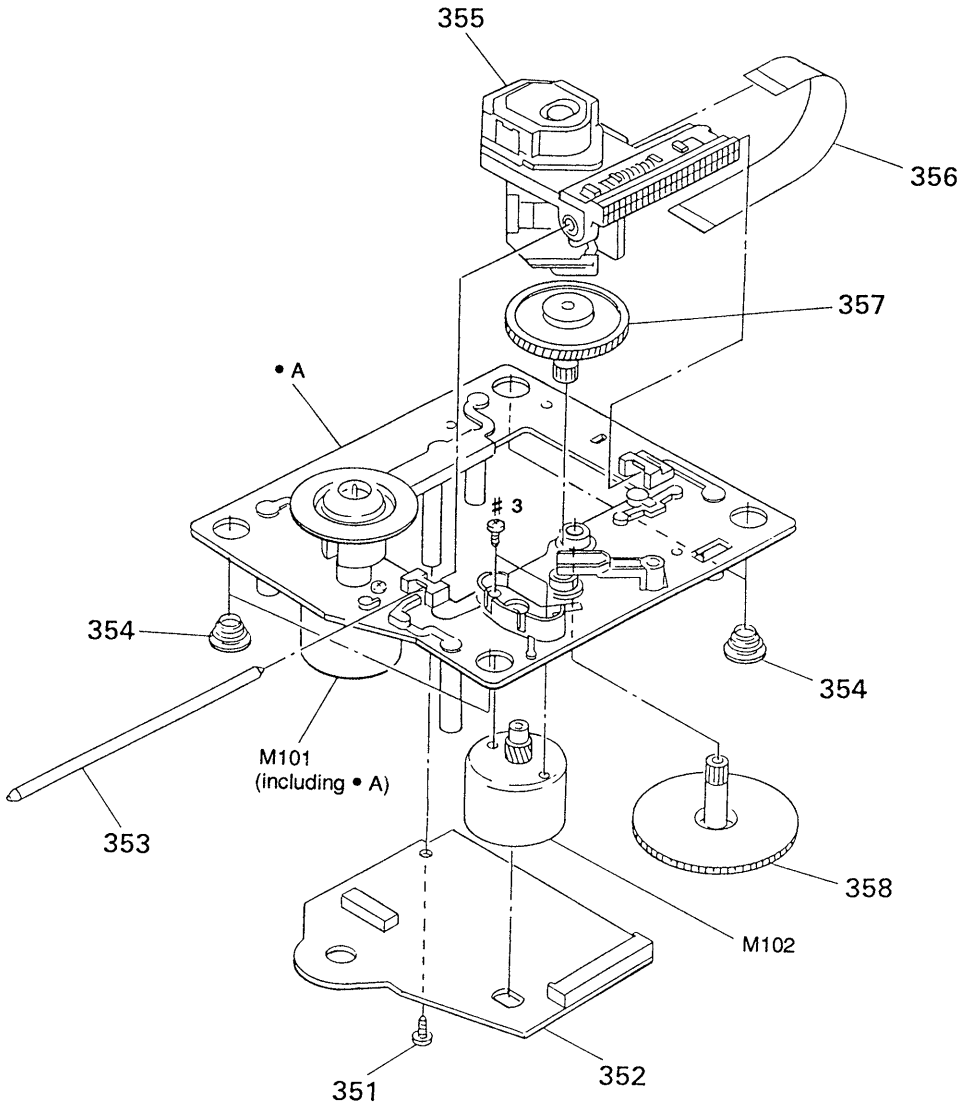
Ref.No.	Part No.	Description	Remark
1	X-4945-433-1	PANEL ASSY, FRONT	
2	4-951-620-01	SCREW (2.6X8), +BVTP	
3	4-970-932-01	PLATE (ST/CD), ORNAMENTAL	
4	4-970-931-01	WINDOW (FL)	
* 5	A-4673-377-A	PANEL BOARD, COMPLETE	
6	1-769-620-11	WIRE (FLAT TYPE) (25 CORE)	
7	4-970-934-01	PANEL (LOADING)	
8	1-769-621-11	WIRE (FLAT TYPE) (19 CORE)	
* 9	A-4673-376-A	MAIN BOARD, COMPLETE	
* 10	3-309-144-21	HEAT SINK	
* 11	4-870-539-00	PLATE, GROUND	
* 12	1-654-816-11	CONNECTOR BOARD	
* 13	4-970-937-01	PANEL, BACK	
14	4-965-822-01	FOOT	
15	4-970-927-21	CASE	
16	3-363-099-01	SCREW (CASE 3 TP2)	
Q102	8-729-900-80	TRANSISTOR DTC114ES	
Q103	8-729-209-15	TRANSISTOR 2SD2012	

4-2. CD MECHANISM SECTION (CDM28-5BD19)



Ref. No.	Part No.	Description	Remark
* 301	4-960-836-01	TABLE, DISC	
* 302	4-960-835-01	HOLDER (M)	
303	1-452-719-11	MAGNET ASSY	
304	4-960-842-01	GEAR (P)	
305	4-960-841-01	PULLEY (S)	
306	4-927-649-01	BELT	
* 307	4-960-839-01	CAM	
* 308	4-960-838-03	BASE (MD)	
* 309	4-917-583-21	BRACKET, YOKE	
310	4-933-134-01	SCREW (+PTPWH M2.6X6)	
311	4-959-996-01	SPRING (932), COMPRESSION	
* 312	4-960-834-01	HOLDER (BU)	
* 313	1-650-836-11	LOADING BOARD	
M903	A-4604-363-A	MOTOR (L) ASSY (LOADING)	

4-3. OPTICAL PICK-UP BLOCK SECTION (BU-5BD19)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
351	4-951-620-01	SCREW (2.6X8), +BVTP	
* 352	A-4673-402-A	BD BOARD, COMPLETE	
353	4-917-565-01	SHAFT, SLED	
354	4-951-940-01	INSULATOR (BU)	
⚠355	8-848-367-11	DEVICE, OPTICAL KSS-213B/K-N	
356	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
357	4-917-567-01	GEAR (M)	
358	4-917-564-01	GEAR (P), FLATNESS	
M101	X-4917-523-4	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	

SECTION 5
ELECTRICAL PARTS LIST

BD

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.

- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μA..., uPA...: μPA..., uPB...: μPB..., uPC...: μPC..., uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH

Ref.No.	Part No.	Description			Remark
*	A-4673-402-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-126-607-11	ELECT CHIP	47uF	20%	4V
C102	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C103	1-164-346-11	CERAMIC CHIP	1uF		16V
C105	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C106	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C107	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C108	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C109	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C110	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C111	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C112	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C113	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C114	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C115	1-126-607-11	ELECT CHIP	47uF	20%	4V
C116	1-163-143-00	CERAMIC CHIP	0.0012uF	5%	50V
C117	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C118	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C119	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C120	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C121	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C122	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C123	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C124	1-126-607-11	ELECT CHIP	47uF	20%	4V
C125	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C126	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C127	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C128	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C129	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C130	1-164-336-11	CERAMIC CHIP	0.33uF		25V
C131	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C132	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C133	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C134	1-164-346-11	CERAMIC CHIP	1uF		16V
C135	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C136	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C137	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C139	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C140	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C141	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C142	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C145	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C146	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C147	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C148	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C149	1-164-346-11	CERAMIC CHIP	1uF		16V
C153	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C154	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
		< CONNECTOR >			
CNU101	1-770-014-11	CONNECTOR, FFC/FPC 16P			
CNU102	1-770-013-11	CONNECTOR, FFC/FPC 19P			
		< IC >			
IC101	8-752-069-56	IC CXA1782BQ-T6			
IC102	8-759-291-06	IC BA6397FP-T1			
IC103	8-752-372-94	IC CXD2507AQ			
IC104	8-759-185-29	IC PCM1710U-BT1			
		< TRANSISTOR >			
Q101	8-729-010-08	TRANSISTOR MSB710-RT1			
Q102	8-729-424-08	TRANSISTOR UN2111			
Q103	8-729-421-22	TRANSISTOR UN2211			
		< RESISTOR >			
R102	1-216-001-00	METAL CHIP	10	5%	1/10W
R103	1-216-049-00	METAL CHIP	1K	5%	1/10W
R104	1-216-097-00	METAL CHIP	100K	5%	1/10W
R105	1-216-089-00	METAL CHIP	47K	5%	1/10W
R106	1-216-089-00	METAL CHIP	47K	5%	1/10W
R107	1-216-089-00	METAL CHIP	47K	5%	1/10W
R108	1-216-089-00	METAL CHIP	47K	5%	1/10W
R109	1-216-097-00	METAL CHIP	100K	5%	1/10W
R112	1-216-077-00	METAL CHIP	15K	5%	1/10W
R113	1-216-077-00	METAL CHIP	15K	5%	1/10W
R114	1-216-101-00	METAL CHIP	150K	5%	1/10W
R115	1-216-101-00	METAL CHIP	150K	5%	1/10W
R116	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R117	1-216-093-00	METAL CHIP	68K	5%	1/10W
R118	1-216-049-00	METAL CHIP	1K	5%	1/10W
R119	1-216-121-00	METAL CHIP	1M	5%	1/10W
R120	1-216-089-00	METAL CHIP	47K	5%	1/10W

BD CONNECTOR LOADING MAIN

Ref.No.	Part No.	Description				Remark
R121	1-216-114-00	METAL GLAZE	510K	5%	1/10W	
R122	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R123	1-216-099-00	METAL CHIP	120K	5%	1/10W	
R124	1-216-091-00	METAL CHIP	56K	5%	1/10W	
R125	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R126	1-216-063-00	METAL CHIP	3.9K	5%	1/10W	
R127	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R128	1-216-105-91	METAL GLAZE	220K	5%	1/10W	
R129	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R130	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R131	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R132	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R133	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R134	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R135	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R136	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R137	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R138	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R139	1-216-033-00	METAL CHIP	220	5%	1/10W	
R140	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R141	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R142	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R143	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R144	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R145	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R146	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R147	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R148	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R149	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R150	1-216-037-00	METAL CHIP	330	5%	1/10W	
R151	1-216-037-00	METAL CHIP	330	5%	1/10W	
R152	1-216-037-00	METAL CHIP	330	5%	1/10W	
R153	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R154	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R156	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R157	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R158	1-216-001-00	METAL CHIP	10	5%	1/10W	
		< VARIABLE RESISTOR >				
RV101	1-241-396-11	RES, ADJ, METAL GLAZE 22K				
RV102	1-241-396-11	RES, ADJ, METAL GLAZE 22K				
RV103	1-241-396-11	RES, ADJ, METAL GLAZE 22K				
		< SWITCH >				
S101	1-572-085-11	SWITCH, LEAF (LIMIT SW)				
		< VIBRATOR >				
X101	1-579-280-11	VIBRATOR, CRYSTAL (16.9344MHz)				

****

Ref.No.	Part No.	Description				Remark
*	1-654-816-11	CONNECTOR BOARD				
		**********				
		< CAPACITOR >				
C301	1-162-282-31	CERAMIC	100PF	10%	50V	
C302	1-164-159-11	CERAMIC	0.1uF		50V	
		< CONNECTOR >				
CN301	1-770-158-11	SOCKET, CONNECTOR 7P				
CN302	1-770-031-11	CONNECTOR, BOARD TO BOARD 7P				
		< COIL >				
L301	1-410-464-11	INDUCTOR	3.3uH			
L302	1-410-464-11	INDUCTOR	3.3uH			

****

*	1-650-836-11	LOADING BOARD				
		**********				
		< CONNECTOR >				
* CN291	1-568-943-11	PIN, CONNECTOR 5P				
		< SWITCH >				
S291	1-572-086-11	SWITCH, LEAF (LOAD OUT)				
S292	1-572-086-11	SWITCH, LEAF (LOAD IN)				

****

*	A-4673-376-A	MAIN BOARD, COMPLETE				
		**********				
*	3-309-144-21	HEAT SINK				
*	4-870-539-00	PLATE, GROUND				
	7-685-871-01	SCREW +BVTT 3X6 (S)				
		< CAPACITOR >				
C101	1-128-489-11	ELECT	3300uF	20%	16V	
C102	1-124-122-11	ELECT	100uF	20%	50V	
C103	1-124-122-11	ELECT	100uF	20%	50V	
C104	1-161-494-00	CERAMIC	0.022uF		25V	
C110	1-161-494-00	CERAMIC	0.022uF		25V	
C111	1-164-159-11	CERAMIC	0.1uF		50V	
C112	1-161-494-00	CERAMIC	0.022uF		25V	
C113	1-126-101-11	ELECT	100uF	20%	16V	
C115	1-124-122-11	ELECT	100uF	20%	50V	
C116	1-124-443-00	ELECT	100uF	20%	10V	
C117	1-124-122-11	ELECT	100uF	20%	50V	
C118	1-124-122-11	ELECT	100uF	20%	50V	
C120	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C121	1-124-443-00	ELECT	100uF	20%	10V	
C122	1-162-306-11	CERAMIC	0.01uF	30%	16V	

Ref.No.	Part No.	Description			Remark
C123	1-124-473-11	ELECT	1000uF	20%	10V
C124	1-162-306-11	CERAMIC	0.01uF	30%	16V
C151	1-164-159-11	CERAMIC	0.1uF		50V
C152	1-164-159-11	CERAMIC	0.1uF		50V
C153	1-164-159-11	CERAMIC	0.1uF		50V
C154	1-164-159-11	CERAMIC	0.1uF		50V
C155	1-164-159-11	CERAMIC	0.1uF		50V
C156	1-161-494-00	CERAMIC	0.022uF		25V
C157	1-162-282-31	CERAMIC	100PF	10%	50V
C158	1-162-290-31	CERAMIC	470PF	10%	50V
C159	1-162-294-31	CERAMIC	0.001uF	10%	50V
C160	1-162-294-31	CERAMIC	0.001uF	10%	50V
C161	1-162-294-31	CERAMIC	0.001uF	10%	50V
C162	1-162-294-31	CERAMIC	0.001uF	10%	50V
C201	1-130-475-00	MYLAR	0.0022uF	5%	50V
C202	1-130-475-00	MYLAR	0.0022uF	5%	50V
C203	1-124-907-11	ELECT	10uF	20%	50V
C204	1-162-290-31	CERAMIC	470PF	10%	50V
C205	1-162-306-11	CERAMIC	0.01uF	30%	16V
C206	1-124-907-11	ELECT	10uF	20%	50V
C251	1-130-475-00	MYLAR	0.0022uF	5%	50V
C252	1-130-475-00	MYLAR	0.0022uF	5%	50V
C253	1-124-907-11	ELECT	10uF	20%	50V
C254	1-162-290-31	CERAMIC	470PF	10%	50V
C255	1-162-306-11	CERAMIC	0.01uF	30%	16V
C256	1-124-907-11	ELECT	10uF	20%	50V
C281	1-162-306-11	CERAMIC	0.01uF	30%	16V
C282	1-162-306-11	CERAMIC	0.01uF	30%	16V
C283	1-162-306-11	CERAMIC	0.01uF	30%	16V
C284	1-164-159-11	CERAMIC	0.1uF		50V
C285	1-124-927-11	ELECT	4.7uF	20%	100V
		< CONNECTOR >			
* CN101	1-691-406-11	CONNECTOR, BOARD TO BOARD 7P			
CN201	1-770-167-11	CONNECTOR, FFC/FPC 19P			
* CN202	1-564-339-00	PIN, CONNECTOR 5P			
* CN203	1-568-841-11	SOCKET, CONNECTOR 25P			
		< DIODE >			
D101	8-719-200-02	DIODE	10E2		
D102	8-719-200-02	DIODE	10E2		
D105	8-719-200-02	DIODE	10E2		
D106	8-719-200-02	DIODE	10E2		
D107	8-719-109-68	DIODE	RD3.6ES-B1		
D108	8-719-109-85	DIODE	RD5.1ES-B2		
D109	8-719-109-89	DIODE	RD5.6ESB2		
D110	8-719-110-72	DIODE	RD30ESB2		
D111	8-719-200-02	DIODE	10E2		
D112	8-719-200-02	DIODE	10E2		
D281	8-719-109-71	DIODE	RD3.9ES-B1		

Ref.No.	Part No.	Description			Remark
		< IC >			
IC101	8-759-820-84	IC	L78MR05		
IC102	8-759-604-86	IC	M5F7807L		
IC201	8-759-900-72	IC	NE5532P		
IC202	8-749-923-04	IC	TOTX178 (CD DIGITAL (OPTICAL OUT))		
IC203	8-759-822-09	IC	LB1641		
		< JACK >			
J201	1-770-272-11	JACK, PIN 2P (CD (OUT))			
		< TRANSISTOR >			
Q101	8-729-900-80	TRANSISTOR	DTC114ES		
Q102	8-729-900-80	TRANSISTOR	DTC114ES		
Q103	8-729-209-15	TRANSISTOR	2SD2012		
Q104	8-729-141-83	TRANSISTOR	2SB1094-LK		
Q111	8-729-900-61	TRANSISTOR	DTA114ES		
Q112	8-729-900-61	TRANSISTOR	DTA114ES		
		< RESISTOR >			
R101	1-249-437-11	CARBON	47K	5%	1/4W
R102	1-249-413-11	CARBON	470	5%	1/4W
R103	1-249-413-11	CARBON	470	5%	1/4W
R104	1-247-807-31	CARBON	100	5%	1/4W
R107	1-249-429-11	CARBON	10K	5%	1/4W
R108	1-249-441-11	CARBON	100K	5%	1/4W
R110	1-249-421-11	CARBON	2.2K	5%	1/4W
R112	1-249-417-11	CARBON	1K	5%	1/4W
R113	1-249-417-11	CARBON	1K	5%	1/4W
R114	1-249-417-11	CARBON	1K	5%	1/4W
R116	1-260-091-11	CARBON	220	5%	1/2W
R117	1-260-091-11	CARBON	220	5%	1/2W
R118	1-260-091-11	CARBON	220	5%	1/2W
R119	1-260-091-11	CARBON	220	5%	1/2W
R120	1-260-090-11	CARBON	180	5%	1/2W
R121	1-260-090-11	CARBON	180	5%	1/2W
R130	1-249-425-11	CARBON	4.7K	5%	1/4W
R131	1-249-425-11	CARBON	4.7K	5%	1/4W
R132	1-249-425-11	CARBON	4.7K	5%	1/4W
R133	1-249-441-11	CARBON	100K	5%	1/4W
R161	1-247-807-31	CARBON	100	5%	1/4W
R162	1-247-807-31	CARBON	100	5%	1/4W
R163	1-247-807-31	CARBON	100	5%	1/4W
R201	1-249-419-11	CARBON	1.5K	5%	1/4W
R202	1-249-419-11	CARBON	1.5K	5%	1/4W
R205	1-249-441-11	CARBON	100K	5%	1/4W
R207	1-249-421-11	CARBON	2.2K	5%	1/4W
R208	1-249-429-11	CARBON	10K	5%	1/4W
R209	1-249-428-11	CARBON	8.2K	5%	1/4W
R210	1-249-441-11	CARBON	100K	5%	1/4W

MAIN PANEL

Ref. No.	Part No.	Description				Remark
R251	1-249-419-11	CARBON	1.5K	5%	1/4W	
R252	1-249-419-11	CARBON	1.5K	5%	1/4W	
R255	1-249-441-11	CARBON	100K	5%	1/4W	
R257	1-249-421-11	CARBON	2.2K	5%	1/4W	
R258	1-249-429-11	CARBON	10K	5%	1/4W	
R259	1-249-428-11	CARBON	8.2K	5%	1/4W	
R260	1-249-441-11	CARBON	100K	5%	1/4W	
**********						
*	A-4673-377-A	PANEL BOARD, COMPLETE				
		**********				
*	4-970-936-01	HOLDER (FL)				
		< CAPACITOR >				
C602	1-164-159-11	CERAMIC	0.1uF		50V	
C604	1-164-159-11	CERAMIC	0.1uF		50V	
C605	1-164-159-11	CERAMIC	0.1uF		50V	
C606	1-162-301-11	CERAMIC	0.0015uF	30%	16V	
C607	1-162-301-11	CERAMIC	0.0015uF	30%	16V	
C608	1-126-177-11	ELECT	100uF	20%	10V	
C609	1-124-916-11	ELECT	22uF	20%	63V	
C610	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C631	1-162-282-31	CERAMIC	100PF	10%	50V	
C674	1-162-290-31	CERAMIC	470PF	10%	50V	
		< CONNECTOR >				
* CN601	1-568-867-11	SOCKET, CONNECTOR 25P				
		< DIODE >				
D601	8-719-987-63	DIODE 1N4148M				
D602	8-719-987-63	DIODE 1N4148M				
D603	8-719-987-63	DIODE 1N4148M				
		< FLUORESCENT INDICATOR >				
FL601	1-517-369-11	INDICATOR TUBE, FLUORESCENT				
		< IC >				
IC601	8-759-340-60	IC uPD78044AGF-091-3B9				
		< TRANSISTOR >				
Q601	8-729-620-05	TRANSISTOR 2SC2603-EF				
Q651	8-729-620-05	TRANSISTOR 2SC2603-EF				
Q652	8-729-620-05	TRANSISTOR 2SC2603-EF				
		< RESISTOR >				
R601	1-249-425-11	CARBON	4.7K	5%	1/4W	
R602	1-249-425-11	CARBON	4.7K	5%	1/4W	
R603	1-249-417-11	CARBON	1K	5%	1/4W	
R604	1-249-417-11	CARBON	1K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R605	1-249-429-11	CARBON	10K	5%	1/4W	
R606	1-249-429-11	CARBON	10K	5%	1/4W	
R607	1-249-429-11	CARBON	10K	5%	1/4W	
R608	1-249-393-11	CARBON	10	5%	1/4W	
R609	1-249-425-11	CARBON	4.7K	5%	1/4W	
R610	1-249-429-11	CARBON	10K	5%	1/4W	
R611	1-249-429-11	CARBON	10K	5%	1/4W	
R612	1-249-413-11	CARBON	470	5%	1/4W	
R613	1-249-415-11	CARBON	680	5%	1/4W	
R614	1-249-417-11	CARBON	1K	5%	1/4W	
R615	1-249-413-11	CARBON	470	5%	1/4W	
R616	1-249-415-11	CARBON	680	5%	1/4W	
R617	1-249-413-11	CARBON	470	5%	1/4W	
R618	1-249-415-11	CARBON	680	5%	1/4W	
R619	1-249-417-11	CARBON	1K	5%	1/4W	
R620	1-249-423-11	CARBON	3.3K	5%	1/4W	
R621	1-249-423-11	CARBON	3.3K	5%	1/4W	
R622	1-249-423-11	CARBON	3.3K	5%	1/4W	
R624	1-249-425-11	CARBON	4.7K	5%	1/4W	
R625	1-249-425-11	CARBON	4.7K	5%	1/4W	
R626	1-247-807-31	CARBON	100	5%	1/4W	
R627	1-247-807-31	CARBON	100	5%	1/4W	
R628	1-247-807-31	CARBON	100	5%	1/4W	
R629	1-247-807-31	CARBON	100	5%	1/4W	
R631	1-249-417-11	CARBON	1K	5%	1/4W	
R651	1-249-441-11	CARBON	100K	5%	1/4W	
R652	1-249-441-11	CARBON	100K	5%	1/4W	
R653	1-249-441-11	CARBON	100K	5%	1/4W	
R654	1-249-441-11	CARBON	100K	5%	1/4W	
R655	1-249-441-11	CARBON	100K	5%	1/4W	
R656	1-249-441-11	CARBON	100K	5%	1/4W	
R657	1-249-441-11	CARBON	100K	5%	1/4W	
R658	1-249-441-11	CARBON	100K	5%	1/4W	
R659	1-249-441-11	CARBON	100K	5%	1/4W	
R660	1-249-441-11	CARBON	100K	5%	1/4W	
R661	1-249-441-11	CARBON	100K	5%	1/4W	
R662	1-249-441-11	CARBON	100K	5%	1/4W	
R663	1-249-441-11	CARBON	100K	5%	1/4W	
R664	1-249-441-11	CARBON	100K	5%	1/4W	
R665	1-249-441-11	CARBON	100K	5%	1/4W	
R666	1-249-441-11	CARBON	100K	5%	1/4W	
R667	1-249-441-11	CARBON	100K	5%	1/4W	
R668	1-249-441-11	CARBON	100K	5%	1/4W	
R669	1-249-441-11	CARBON	100K	5%	1/4W	
R670	1-249-441-11	CARBON	100K	5%	1/4W	
R671	1-249-441-11	CARBON	100K	5%	1/4W	
R672	1-249-441-11	CARBON	100K	5%	1/4W	
R673	1-249-441-11	CARBON	100K	5%	1/4W	
R674	1-249-441-11	CARBON	100K	5%	1/4W	
R675	1-249-429-11	CARBON	10K	5%	1/4W	

Ref.No.	Part No.	Description	Remark
R676	1-249-441-11	CARBON 100K 5% 1/4W	
R677	1-249-429-11	CARBON 10K 5% 1/4W	
		< SWITCH >	
S601	1-554-303-21	SWITCH, TACTILE (EDIT)	
S602	1-554-303-21	SWITCH, TACTILE (CHECK)	
S603	1-554-303-21	SWITCH, TACTILE (CLEAR)	
S604	1-554-303-21	SWITCH, TACTILE (▶▶)	
S605	1-554-303-21	SWITCH, TACTILE (TIME)	
S606	1-554-303-21	SWITCH, TACTILE (REPEAT)	
S607	1-554-303-21	SWITCH, TACTILE (PLAY MODE)	
S608	1-554-303-21	SWITCH, TACTILE (▷/▯▯)	
S609	1-554-303-21	SWITCH, TACTILE (□)	
S610	1-554-303-21	SWITCH, TACTILE (OPEN/CLOSE)	
S611	1-554-303-21	SWITCH, TACTILE (◀◀)	
S612	1-467-938-11	ENCODER, ROTARY (I◀◀ AMS ▶▶I)	
		< VIBRATOR >	
X601	1-579-233-11	VIBRATOR, CERAMIC (5MHz)	
**********			
		MISCELLANEOUS	
		**********	
6	1-769-620-11	WIRE (FLAT TYPE) (25 CORE)	
8	1-769-621-11	WIRE (FLAT TYPE) (19 CORE)	
303	1-452-719-11	MAGNET ASSY	
⚠355	8-848-367-11	DEVICE, OPTICAL KSS-213B/K-N	
356	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
M101	X-4917-523-4	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	
M903	A-4604-363-A	MOTOR (L) ASSY (LOADING)	
Q102	8-729-900-80	TRANSISTOR DTC114ES	
Q103	8-729-209-15	TRANSISTOR 2SD2012	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
#3	7-621-255-15	SCREW +P 2X3	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

9-959-981-11

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Consumer A&V Products Company
Home A&V Products Div.

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Quality Engineering Dept.

CDP-EX10

SONY

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model
Tourist Model

SUPPLEMENT-1

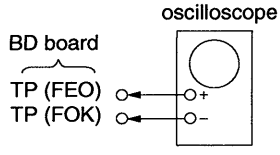
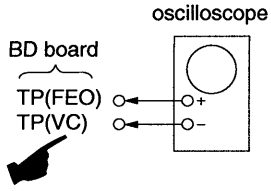
File this supplement with the service manual.

Subject : 1. CORRECTION
2. S CURVE CHECK SPECIFICATION CHANGED
3. PARTS CHANGED & PARTS SUPPLY CLASSIFICATION CHANGED

(SPM-96036)

1. CORRECTION

• Correct your service manual as shown below.
☛ : indicates corrected portion.

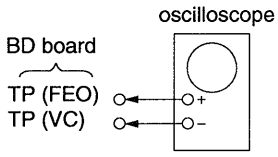
Page	INCORRECT	CORRECT
4	**S Curve Check** 	**S Curve Check** 

2. S CURVE CHECK SPECIFICATION CHANGED

The value of mounted parts of the BD board has changed due to improvements.
Following this change, the S Curve check values have also changed as follows.
☛ : indicates changed portion

Ref No.	FORMER					NEW				
	Part No.	Description			Remark	Part No.	Description			Remark
	*** BD BOARD, COMPLETE ***					*** BD BOARD, COMPLETE ***				
C116	1-163-143-00	CERAMIC CHIP	0.0012μF	5%	50V	1-163-016-00	CERAMIC CHIP	0.0039μF	10%	50V
C118	1-163-038-91	CERAMIC CHIP	0.1μF		25V	1-107-823-11	CERAMIC CHIP	0.47μF	10%	16V
R105	1-216-089-00	METAL CHIP	47K	5%	1/10W	1-216-093-00	METAL CHIP	68K	5%	1/10W
R106	1-216-089-00	METAL CHIP	47K	5%	1/10W	1-216-093-00	METAL CHIP	68K	5%	1/10W
R107	1-216-089-00	METAL CHIP	47K	5%	1/10W	1-216-093-00	METAL CHIP	68K	5%	1/10W
R108	1-216-089-00	METAL CHIP	47K	5%	1/10W	1-216-093-00	METAL CHIP	68K	5%	1/10W
R112	1-216-077-00	METAL CHIP	15K	5%	1/10W	1-216-083-00	METAL CHIP	27K	5%	1/10W
R113	1-216-077-00	METAL CHIP	15K	5%	1/10W	1-216-083-00	METAL CHIP	27K	5%	1/10W
R117	1-216-093-00	METAL CHIP	68K	5%	1/10W	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R119	1-216-121-00	METAL CHIP	1M	5%	1/10W	1-216-089-91	METAL CHIP	47K	5%	1/10W
R153	1-216-089-00	METAL CHIP	47K	5%	1/10W	1-216-082-00	METAL CHIP	24K	5%	1/10W
R156	1-216-081-00	METAL CHIP	22K	5%	1/10W	1-216-085-00	METAL CHIP	33K	5%	1/10W

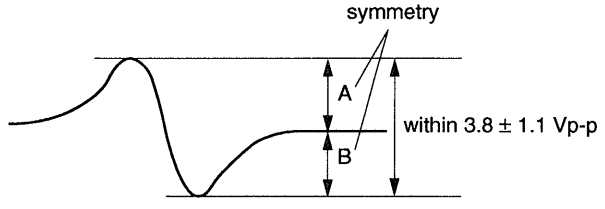
S Curve Check — Page 4 —



Procedure :

1. Connect oscilloscope to test point TP (FEO).
2. Connect between test point TP (FOK) and GND by lead wire.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3.8±1.1 Vp-p.

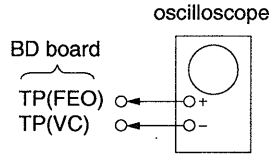
S-curve waveform



6. After check, remove the lead wire connected in step 2.

Note : • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

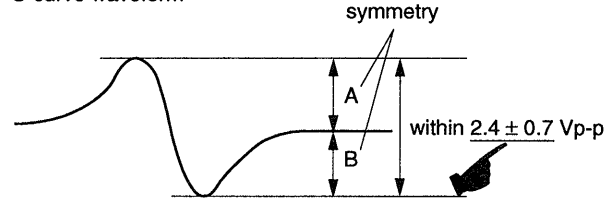
S Curve Check — Page 4 —



Procedure :

1. Connect oscilloscope to test point TP (FEO).
2. Connect between test point TP (FOK) and GND by lead wire.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 2.4±0.7 Vp-p.

☛ S-curve waveform



6. After check, remove the lead wire connected in step 2.

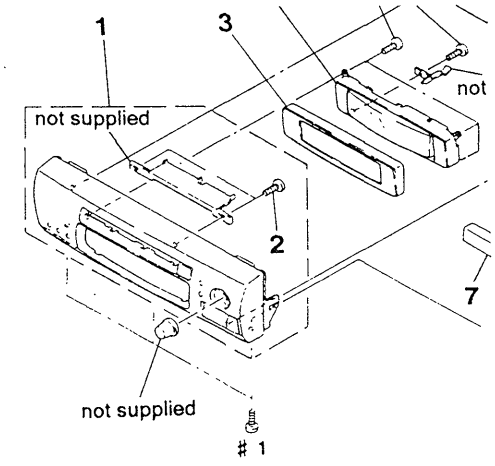
Note : • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

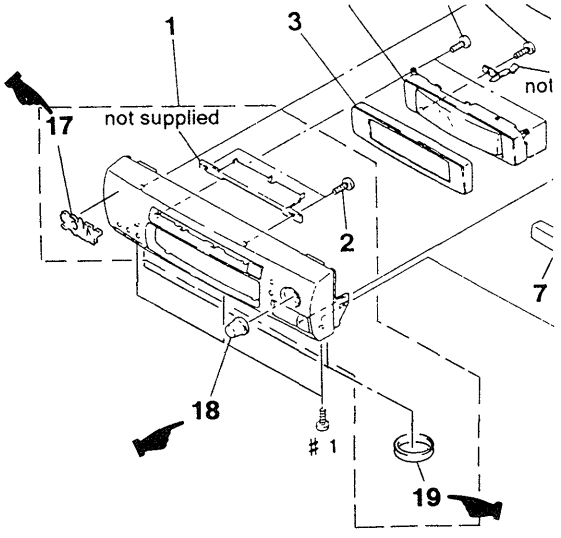
3. PARTS CHANGED & PARTS SUPPLY CLASSIFICATION CHANGED

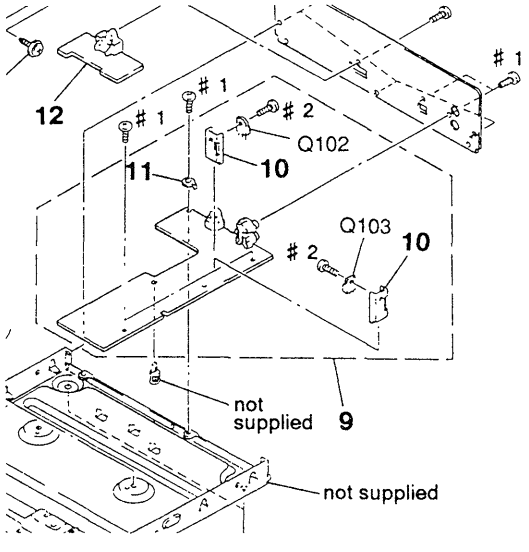
• Revise your service manual as shown below due to parts supply classification has been changed.

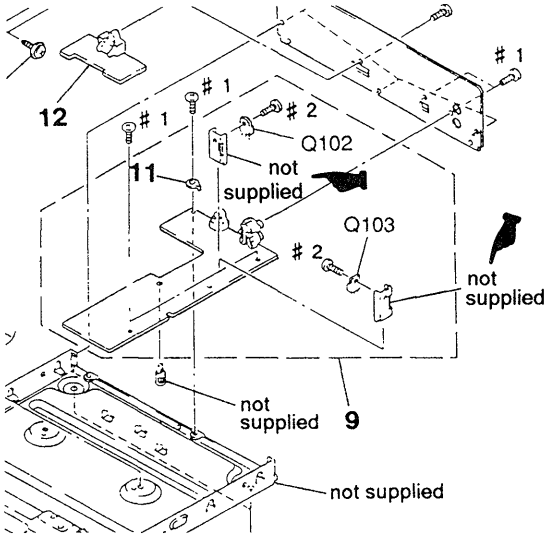
: indicates changed portion.

Page	CURRENT				REVISED			
20	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
			*** EXPLODED VIEWS ***				*** EXPLODED VIEWS ***	
	* 10	3-309-144-21	HEAT SINK				Not supplied	
	* 11	4-870-539-00	PLATE, GROUND		* 11	4-870-539-11	PLATE, GROUND	
			not supplied		17	4-962-708-01	EMBLEM (4-A), SONY	
			not supplied		18	4-970-933-01	KNOB (JOG)	
			not supplied		19	4-972-656-01	FOOT (ORNAMENT)	









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SONY
SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model
Tourist Model

CORRECTION-1

Correct your service manual as shown below.

☛ : **indicates corrected portion.**

Page	INCORRECT			CORRECT	
	Ref.No.	Part No.	Description	Part No.	Description
20	3	4-970-932-01	PLATE (ST/CD), ORNAMENTAL	4-970-932-11 ☛	PLATE (ST/CD), ORNAMENTAL

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